

HEALTH From the Hive

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Image Courtesy of Sajjad Faze

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What is Propolis; a Tale of Two “Cities”



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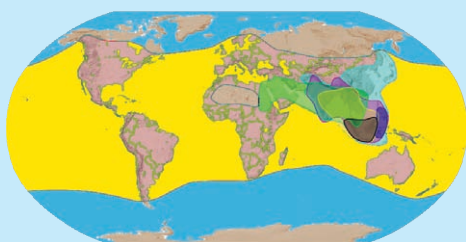


Image Courtesy of Séminur

Global Buzz

Bees exist in a wide variety of habitats and live on every continent, except Antarctica.

To get the fullest view of what Propolis is, we need to take a look at two different perspectives: the Bee’s and human’s. Propolis is a waxy resin that Bees collect from the resinous sap from a number of different plants using their mandibles. This resin is mixed with Bee saliva and then added to Beeswax. This is no simple feat; it takes a colony of Bees about one year to collect 150 – 200 g of Propolis. It was originally thought that the Bees used Propolis primarily for structural support but we now know that the hive uses Propolis for a number of purposes. Bees will surround the carcass of any hive invader once it has been killed to keep the body from breaking down and threatening the health of the hive. It is also thought that Propolis is used in order to maintain the temperature of the hive as well as to fill any cracks or holes.

The Bees employ Propolis as a sort of “immune system” for the hive. Imagine if you would, hundreds, if not thousands, of people living together in one enclosed space. You can easily see how one person getting a sniffle could quickly fly through this community. And so it is with Bees; by using Propolis they are actually able to make the crowded space of the hive one of the cleanest environments in nature. Interestingly, this application does not seem to be by chance or coincidental. One study had researchers paint the inside of two out of three Beehive boxes with Propolis. After seven days Bees were gathered and their immune systems were examined. What researchers discovered was that in the Propolis painted hives the Bees had a lower bacterial load as well as a quieter immune system.

To find out if Bees knew that Propolis provides this protection a separate study looked at introducing a disease into the hive. Here researchers found that the Bees actually gathered more Propolis



One of the
titles of Egyptian
Pharaoh’s was
“Bee King”.



Health From The Hive

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when the hive was challenged with this threat.

This is why the Bees line the entrance to their hive – it acts as a “Bee – wash” for all returning Bees to make sure they are not bringing any infections back to the hive. In fact this is where the word “Propolis” comes from; “pro-” from the Greek meaning “in front of” and “polis” denoting “city”.

Image Courtesy of Klafubra



Pliny Plinius the Elder, famous Roman physician, wrote of Propolis: *“heals sores when it appears hopeless for them to mend.”*



“Health From The Hive” Newsletter

Welcome to the 1st edition of the “*Health From The Hive*” newsletter, brought to you by the Propolis Science Center, an effort by the non-profit Radiant Health Project to share information, research, and uses of the powerful healing gifts that Bees provide. This, our first effort, is intended to provide you with an introduction into the fascinating world of Bee Propolis and a brief look into the vast and varied array of healing actions that it offers us. While used for literally thousands of years Propolis is still something fairly new to most of us here in the West. Those of us who are familiar with Propolis also tend to have a narrow view of Propolis’ healing applications limiting it primarily to its powerful anti-microbial actions. We hope that this issue, and future additions will bring to light more and more of the promising benefits that the hive has to share with us.

The Radiant Health Project is being created to support and encourage a dialogue and sharing of information around optimizing our health, vitality, and even longevity rather than the dominant approach of medicine today which focuses on disease, symptoms, and waiting around for things to break.

We would love to hear from you. Please let us know what you think and what you’d like to see covered in future issues. We will incorporate an ongoing Q & A in “*Health From The Hive*”, so go to **PropolisScience.org** or **www.facebook.com/healthfromthehive** to pose your queries there.

EGYPTIANS
ASSOCIATED
PROPOLIS WITH
ETERNAL LIFE.



Image Courtesy of Klafubra

Bees, Today’s “Canary” in a Coal Mine

Years ago miners would carry a canary into the mines to act as a primitive air quality test. Canaries, it seems, are much more sensitive to the air quality so that when miners saw a bird in trouble, they knew to get out quickly.

So what does this have to do with Bees you ask? I am making a case for Bees being society’s “canary in the mine” by warning us of the environmental and health consequences of the path we are currently on. The very survival of these, as well as other pollinators, is at risk now due to something called Colony Collapse Disorder. The convergence of multiple factors, such as poor diet, stress, pollution, infection, pesticides, climate change, and more have created conditions that have significantly decreased the number of hives (just this past year by over 40%). Does this sound familiar? Aren’t humans under a similar assault?

And the Bees are more than our environmental bellwether. One third of what we eat relies on Bees for pollination, including apples, walnuts, berries, coffee, and my summer favorite, watermelon. (*Look to future issues to find out what you can do to help.*)

Mark J Kaylor is a holistic health practitioner and lecturer who integrates herbs, nutrition, naturopathy and various traditional healing modalities. In his role as an educator and healer, Mark works passionately to encourage individuals to empower themselves and to discover their own path to radiant health. He has worked in the Natural Foods Industry for over 30 years as a leading holistic health educator, and formulator. Mark is the founder of **Radiant Health Project** and author of “*Health From The Hive*”. You can reach him at his website **www.radianthealthproject.com**.



Red Propolis

A more recently “discovered” Propolis is the Brazilian Red Propolis that is gathered from the mangroves in the Northeast region of Brazil from the perennial shrub *Dalbergia ecastophyllum*. This type of Propolis is exceptionally rich in isoflavanoids thanks to its legume source. Brazilian Red Propolis has demonstrated promise in early lab studies for both pancreatic cancer and leukemia. The isoflavones in Brazilian Red Propolis make it a useful ally in relieving many of the symptoms of menopause.



Green Propolis

Green Propolis is gathered from the buds and young leaves of the *Baccharis dracunculifolia* plant found in the Southeast corner of Brazil. Brazilian Green Propolis



contains a promising healing compound called artepillin C, along with several other powerful constituents. Artepillin C is anti-inflammatory, anti-bacterial, anti-viral, anti-tumor, and also an anti-oxidant.

Brown Propolis

Brown Propolis is by far the most common and widely used type of Bee Propolis. Used for hundreds of years in traditional healing and supported by a growing body of research since the 1960's. Brown Propolis is best known for its “anti”-actions: anti-biotic, anti-viral, anti-allergenic, anti-bacterial, anti-fungal, anti-inflammatory, anti-cancer, anti-parasitic, along with its immune supporting actions.



Image Courtesy of Hadi

🐝 Propolis' Benefits 101 🐝

Long the bane of beekeepers, Propolis, which is most widely known for its anti-microbial properties, is now becoming widely recognized for a broader array of health and healing benefits. While employed in many different healing traditions for hundreds of years, it was used by these different cultures primarily for antimicrobial and immune related actions. Today Propolis has a growing and extensive body of research over the last 60+ years that supports it for these traditional applications as well as for a number of new promising uses. But, it is not without good reason that it was first known for its germ fighting talents.

- Hippocrates, the founder of modern medicine, utilized Propolis to treat sores and ulcers.
- While in China during the Ming Dynasty, Propolis was used to treat toothaches and bacterial infections.

- Roman legionnaires carried Propolis with them in their “first aid” pouches.
- The Incas utilized Propolis for reducing a fever.

One of these invaders that virtually every one of us has had to deal with is a virus. Propolis brings to the table a number of antiviral specific actions that include reducing the viral load, blocking viral DNA synthesis, inhibiting infectious activity, slowing viral activation, and preventing the virus from entering a host cell. Its antiviral properties have been tested against influenza A and B, herpes, HPV, H1N1, and even polio. One study found that Propolis decreased mortality and increased survival time when infected with a deadly influenza.

Bacteria are also susceptible to the actions of Propolis. It inhibits bacterial cell division, destroys the cell structure of the bacteria, and causes bacterial destruction.



Propolis Benefits 101 – Continued from page 3

These antibacterial actions have been well researched dating back to the 1940s where it was tested against strep and typhoid infections. Later, in the 1960s, it was tested against different bacterial strains and found to strongly inhibit 25 of 39 types of bacteria. A 1985 study looked at 75 different bacterial strains, 69 of which were strep, and found all were highly sensitive to Propolis. In a more recent study Propolis was active against 15 MRSA strains. Many of us are aware, more and more bacteria are becoming antibiotic resistant. As an adjunct therapy with antibiotic use, Propolis can make some antibiotics more effective while reducing the likelihood of antibiotic resistance developing.

As many of nature's powerful healing allies do, Propolis offers its healing gifts in a holistic manner. While the antimicrobial actions of Propolis are profound and effective it also works by supporting our body's own natural defense system. Propolis is a potent immune modulator that enhances immune system activity, decreases inflammation, increases antibody production, activates macrophage, and increases cancer scavenging NK cells.

As I imagine many of you are already aware, our bodies are under constant stress from a range of toxins, from the air we breathe, to the water we drink, and even the food we eat; all of which tax and strain our liver. Here too, Propolis comes to our aid. A powerful, not-well-known

non-antimicrobial application of Propolis is found in Propolis' liver

protecting abilities. These include restoring healthy levels of liver enzymes, decreasing free radicals in the liver – doubly important in the liver since it is responsible for detoxifying and removing deadly free radical producing toxins from the body, improving liver cell viability, lowering liver triglyceride levels, reducing lipid peroxidation, and boosting levels of the body's most powerful endogenous antioxidant, a.k.a. glutathione.

Propolis has demonstrated its hepato-protective actions against several different types of toxins, including alcohol and heavy metals. For example, Propolis has been found to be protective against the toxicity of mercury, one of the most dangerous toxins that our body has to deal with on a regular basis, albeit from seafood or amalgam fillings or in the vaccines we are given. Propolis was found equally or more effective than silymarin, an active compound found in milk thistle, in supporting liver health as measured by several parameters.

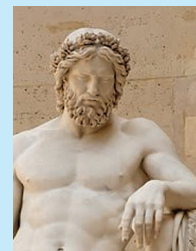
While the above information alone makes Propolis a powerful healing ally there is still so much more to its healing gifts (*see chart at left*). In future issues we will explore in depth the many promising and useful applications of Propolis along with the corresponding research. We hope you will stay tuned.



Bees in History

In Greek Mythology the "father of apiculture", Aristaios – the son of

Apollo and the nymph Cyrene, was said to have learned the skill of beekeeping from the muses.



Brown Propolis is commonly gathered from Poplar, Birch, Alder, Pine and Willow trees.

SOME OF PROPOLIS' BENEFITS

Anti-microbial, Anti-fungal, Anti-viral, Anti-protozoan, Anti-ulcer, Bactericidal, Bacteriostatic, Herpes, Anti-cavity, Gingivitis, Canker sores, Tooth extractions, Oral bacteria, Rhinitis, Herpes, Cartilage repair, Cardio-protective, Anti-inflammatory, Anti-oxidant, Asthma, Bronchitis, Anesthetic, Wound healing, Tissue regeneration, Anti-bleeding, Anti-histaminic, Heat stress, Warts, Reduce cholesterol, Lower blood pressure, Antiseptic, UV protection, Anti-biotic synergy, Vaccine synergy, Bone formation, Fertility endometriosis, Neuro-protective, Hepato-protective, Respiratory infections, Leukorrhea, Candidiasis, Tonsillitis, Pancreatic health, Anemia, UTIs, Gastritis, Burns, Ear Infections, Headaches, Seasonal allergies, Gout, Immune modulation, Protection fluoride toxicity, Anti-cancer: Prostate, Breast, Cervical, Kidney, Colon, Pancreas, Laryngeal, Glioma, Squamous, Leukemia, Radioprotective, Anti-metastatic, Apoptosis induction

In Our Next Issue

- What are some of Propolis historical applications.
- Are there any safety issues associated with the use of Propolis?
- How Propolis can provide immune support for the cold & flu season.
- How to find a quality, effective Propolis product to use for yourself and your family.
- And much, much, more...
- And of course, your questions answered.